

Plan Review Committee Results for December/January 05/06

Subject: Unusually Shaped Buildings	YES	NO	% Yes	% NO
Given for Question #1: Patio Cover extending more than 6 ft. beyond a braced wall line and sharing the same roof line as the single family dwelling it is attached to and supported by a header and 4x4 posts with post bases on the opposite end.				
1. In seismic zone 3, would your jurisdiction require a lateral-force-resisting system design as per CBC sections 2320.4.4, 2320.5.4 and 2320.5.4.2 as required for unusually shaped buildings?	8	0	100%	0%
2. Would your jurisdiction require a lateral force resisting design for patio covers associated with single-family dwellings?	2	6	25%	75%
3. Would your jurisdiction require a lateral force resisting design for patio covers sharing the same roof line as the single family dwelling it is attached to and supported by a header and 4x4 posts with post bases on the opposite end?	6	3	66%	33%
4. Would your jurisdiction's answers to the above scenarios apply regardless of occupancy type?	4	3	57%	42%
Subject: Assumed Property Lines				
Two type VN buildings housing four apartments in each building. The buildings are six feet apart and on the same lot. The buildings are considered portions of one building per CBC 505.3 exception in lieu of assuming a property line between them.				
5. Would your jurisdiction require NFPA 13R sprinklers in the buildings per CBC 904.2.9?	5	3	63%	37%
6. Would your jurisdiction require one-hour separation between units per CBC 310.2.2 on the exterior wall(s) adjacent to the other building?	6	2	75%	25%
7. Would you require a unit with a lower able kitchen sick and work space (see 1112A.4 exception 1) in each of the two buildings per CBC 1119A.1	3	4	42%	57%
Total Spokesperson Responses	8 out of 40			
Total Responses	15			

Comments by Spokespersons

- Question #2. Depends on how high it is as well. Need more specific information.
 Question #5. Local ordinance requires sprinklers
 Question #6. need more information

Question #2 Only if not attached to SFR & <30" above grade.

Question #4 All commercial would require engineering.

Question #5 & #6. Would be either/or.

Comments by Non Jurisdictional Spokespersons

Question #1. I would not require it, based on how the roof was constructed - it would appear that the roof, if adequately attached along the length of roof and the roof diaphragm adequately attached I fail to understand how it would fail (considering the materials) however I would require a couple of 45 degree braces from the posts to the beam.

Question #2. yes

Question #3.yes

Question #4. no. Only for a SFD.

Question #5-6-7 if they are using the exception 505.3 I would consider it as one building and the requirements would apply the same as a single structure.

Has anyone developed an energy form for additions that is prescriptive? We struggle with the small additions that are less than 1000 sf. (often they are only 200 sf.).

It sure would be nice to have a Sacramento Valley developed form that would work for these additions. (One for each of the climate zones in our Sacramento Valley Area) Thanks

PRC Supported Response Question #1

Yes

If any building or portion of a building located in Seismic zone 3 falls within the unusually shaped buildings provisions of CBC 2320.5.4, lateral-force-resisting system design would be required.

PRC Supported Response Question #2

Yes

Generally, all patio covers should be provided with a lateral force resisting design from a licensed engineer or registered architect, as they do not typically comply with the conventional construction provisions of CBC 2320.

The PRC recognizes that many local jurisdictions have typical wood framed design recommendations and/or pre-engineered details for such structures that are not engineered and are typically "overbuilt". The PRC feels that these small wood framed patio covers, associated with single family dwellings, generally do not pose a significant life safety threat and each jurisdiction must retain the ability to make the determination on a case by case basis as there may be snow, wind and/or seismic conditions that cannot be determined in this forum.

PRC Supported Response Question #3

Yes

The patio cover should have a lateral force design because it extends more than 6' past the braced wall line per CBC 2320.5.4.2. If it can be demonstrated that the front of the patio cover is parallel or offset not more than 4' from the braced wall line, then a lateral force design would not be required as compliance with the conventional construction provisions would have been met. The PRC recognizes that small configurations and structures such as entryways, eaves and etc. may not be required to have a lateral force design as they are so small and have little or no effect on the overall structure. These should be evaluated on a case-by-case basis.

PRC Supported Response Question #4

No

The PRC does not feel that the scenarios apply regardless of the occupancy type. The conventional construction provisions only apply to those occupancies listed in CBC section 2320.1. However the scenarios as listed above would generally require a lateral force design.

PRC Supported Response Question #5

Yes

The PRC believes that once the exception of CBC 503.3 is used and is considered one building, an automatic sprinkler system would be required per CBC 904.2.9. There is a direct relation between building limitations set forth in chapter 5 and the fire-protection systems in chapter 9 as they both relate to the transfer and spread of "fire" within and between buildings. In this case the fire sprinklers are the trade-off for the elimination of the required ten feet of separation between buildings. This is similar to the use of sprinklers to increase the number of stories.

PRC Supported Response Question #6

Yes

The PRC believes that once the exception of CBC 503.3 is used and is considered one building, the requirement of rated walls and floor/ceilings per 310.2.2 must be met. Recognizing that the typical one hour wall between units in the interior is comparable to two exterior walls with a six foot separation, rating the exterior walls may not be necessary. It should be noted that the PRC feels there is a direct relation between building limitations set forth in chapter 5 and occupancy requirements in chapter 3 as they both relate to the transfer and spread of “fire” within and between buildings.

PRC Supported Response Question #7

Yes

The PRC does not believe that the provisions of CBC section 503.3 are related to the accessibility requirements of CBC Chapter 11A. The PRC feels that for the purposes of applying the accessibility standards, there are 2 separate buildings.

Thank You,

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